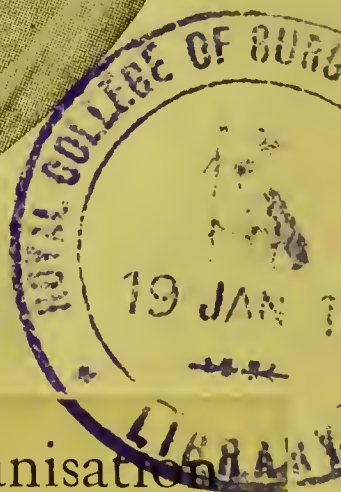


STANDARDIZATION IN EDUCATION

BY COL. B. R. WARD, R.E.

22



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STANDARDIZATION IN EDUCATION.

THE following remarks on Standardization are extracted from a pamphlet by Colonel B. R. Ward, R. E., entitled: "The training of a Recruit for the Royal Engineers," Part II.

They show how a record of military training or education can be kept in chart form for the information of organizers or inspectors of such training.

There appears to be no reason why methods which have proved useful in recording results of military training should not be equally effective in keeping track of results in the large and immensely important sphere of national elementary education.

The Theoretic Standard of Humanity of Mr. Bruce-Williams forms a practical working hypothesis for formulating such a scheme of record. Details will have to be worked out by the experts concerned, but a general idea of how such a system could be inaugurated will, it is thought, be obtained more easily by studying the method actually followed by the military authorities at the R.E. Recruit Dépôt at Chatham, than by endeavouring at this stage to formulate a detailed scheme for recording results of National Elementary Education.

"STANDARDIZATION."

"TRAINING or education implies a minimum or qualifying standard to be attained.

The six months' course in the Training Battalion would be largely thrown away unless a definite standard in military training were reached.

The minimum standard aimed at is fitness on the part of the recruit to take his place in the ranks of a Service Company.

Certain standards have to be attained before the recruit is accepted for training at all.

A famous commanding officer of the French Foreign Legion was accustomed to say that the qualifications he required for enlistment in the Legion were that recruits should be of the male sex and *bien trempés*. The words "*bien trempés*" may be rendered as adventurous, or possessing the fighting spirit.

Our system of enlistment, as in the case of the Foreign Legion, is a voluntary one, and in addition to the sexual standard, we also practically demand a standard measured in terms of the emotions or the will, a standard which may be described as the possession of a desire, or at all events a willingness to enlist.

No standard of nationality exists in the Foreign Legion. *Esprit de Corps* and a rigid discipline take the place of this and of the various other standards required in the case of national armies.

A third standard required in the Royal Engineers is that of practical proficiency or æsthetic capacity as regards trade qualifications. This test is carried out in the workshops of the School of Military Engineering, where every recruit is tested at his trade.

A moral standard, as indicated by a character from his last employer, is also insisted upon.

A physical standard depending on height and chest measurement, as also a standard of age, viz., 18 to 25 years, are laid down in Recruiting Regulations.

A standard of vitality—freedom from disease or constitutional weakness—is ensured by medical inspection.

Lastly, the enlistment is not considered to have been completely carried out until the recruit has been inspected and passed by an approving officer.

No definite intellectual standard is required in the case of a prospective recruit; but every recruit soon after joining attends school for examination in order to ascertain his educational attainments.

He is then graded as follows :—

- A. Good Education.
- B. Fair Education.
- C. Moderate Education.
- D. Inferior Education.
- E. Illiterate.

A series of pattern tests for standardizing recruits intellectu-

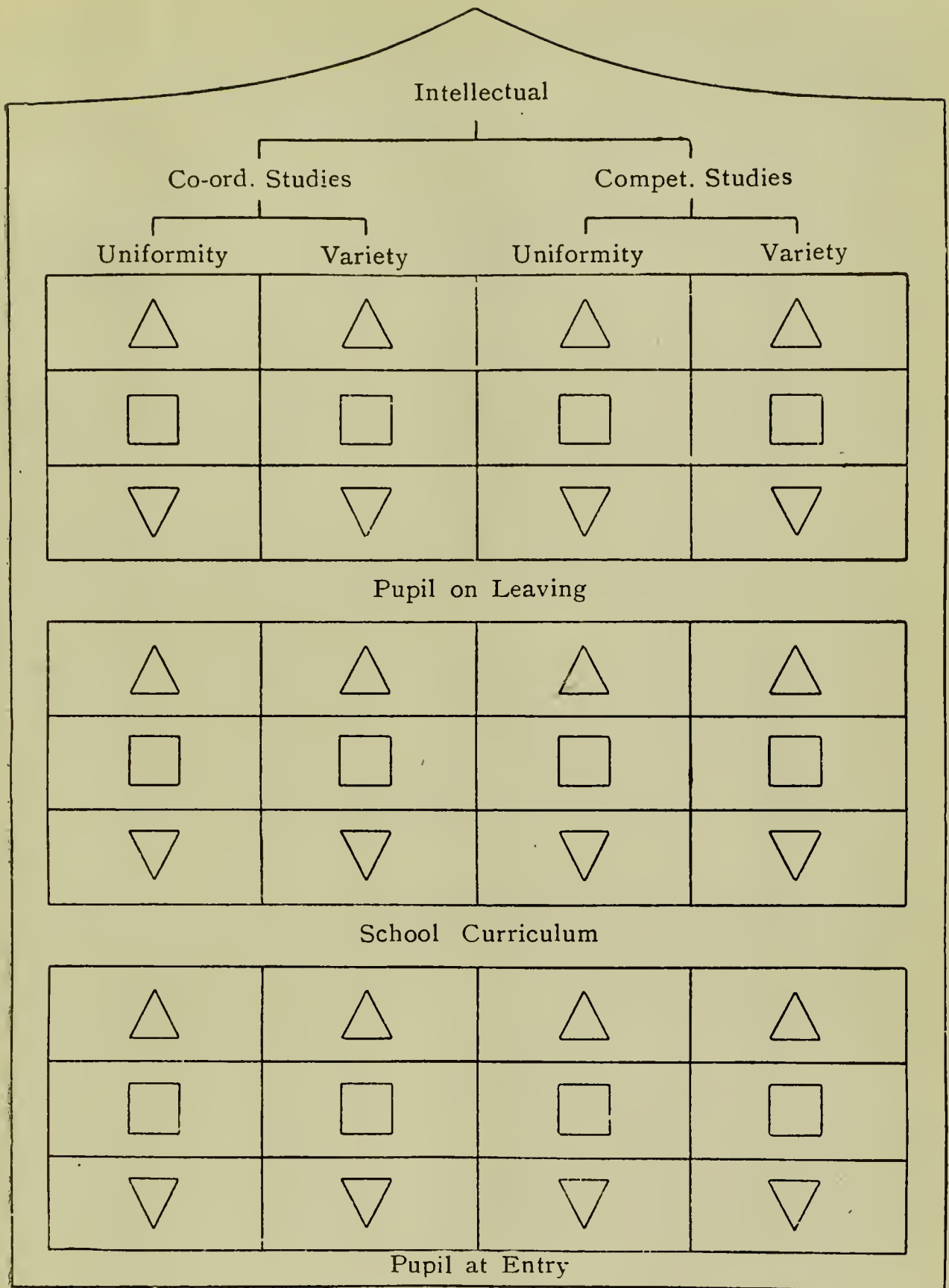


Diagram of unit applied to Education.

See "Co-ordination of Knowledge," post free on application from K. O. B., Ltd.

ally as above is given in the "Standing Orders for Inspectors of Army Schools."

The material supplied to the Training Battalion, having been

tested in all these respects, is considered capable of benefiting by the instruction given in the Battalion, and may be presumed—given efficient instruction—to be likely to attain eventually the standard aimed at in the six months' course, namely, fitness for a place in the ranks of a Service Company.

Some method of standardization is necessary during the course and also at the close of it, in order to give a point to march on both for instructors and recruits; and also in order to encourage them at certain fixed stages of the course by a public announcement that they have attained a definite standard.

The standard in the various courses is decided partly by inspection—as is done in the case of Drill and Physical Training—and partly by results—as shown by Musketry Classification Practices and the Fieldworks Examination.

A recruit failing to come up to the required standard of drill, discipline, or intelligence can be discharged under the authority conferred in *King's Regulations* as “not likely to make an efficient soldier.”

Havelock says somewhere that in every company of a hundred men there will always be ten who will storm the gates of hell, eighty who will follow if they get the lead, and ten who will run away if they get the chance. In other words, in every hundred men ten per cent. will be above the average, eighty per cent. will be average men, and ten per cent. will be below the average.

An example illustrating this idea of Havelock's will be found in an account by the famous war correspondent, Archibald Forbes, of an attack carried out by Skobelev at Plevna in 1878. It was necessary to turn out the Turks from a line of trenches on the Green Hills, and Skobelev had called for volunteers for this dangerous service. The attack was carried out on a foggy night.

“The Russian front was within 600 paces of the Turkish outposts; yet its vicinity had not been detected. The chain of skirmishers was creeping up, Skobelev himself with it. After a short suspense there was the report of a single rifle, and presently from the Turkish left there came a rattle of musketry to which for the moment the Russians made no reply.

“‘Children, follow me!’ shouted Skobelev's powerful voice from somewhere in the fog. It was drowned in the cheer that followed it, in the beating of the drums, the clamour of the rushing masses and the crashing volleys of the enemy, who had suddenly sprung into full activity. We could see nothing save the flashes through the darkness; but the Turkish bullets were reaching us, singing over our heads, and occasionally striking down a man of the reserves. Millett and I went forward on foot, leaving our ponies with the Cossacks in the trenches. Passing a wounded man slowly

dragging himself rearward, using his rifle as a crutch, we asked him where was General Skobelev?

“ ‘Where?’ was the answer. ‘He is up in front, leading the skirmishers who are climbing into the Turkish rifle-pits. He is a devil of a man!’ And so the wounded soldier limped on.

“As we drew closer we could every now and again hear Skobelev’s voice, audible through the fog, cheering, directing, commanding. ‘I want guns brought up here!’ we heard him shout—‘I must have guns! Makhram! hurry back, and bring up a battery!’ And then Makhram passed us like a flash, galloping at headlong speed, and was lost to sight in the darkness and fog. Now we heard behind us a rush of shouting men—the volunteers hurrying forward to occupy the outpost lodgments from which the Turkish pickets had been driven out by the skirmishers. Their advance was curiously ragged; they came on in loose clumps, destitute of any order, the officers in front shouting and brandishing their swords. The bravest men came straight on, reached the lodgments, and went forward towards the advanced trench of the enemy’s main work, driving before them the fugitive Turkish pickets. The less enterprising followed with feebler dash in support: getting forward, it was true, but more slowly than the ardent leaders, and staggered occasionally by the heavy fire from the Turkish trenches. The rearmost of the volunteers, after passing the lodgments, had not heart to endure the storm of bullet fire. They hung, and some ran back into the feeble shelter offered by the lodgments in the lee of which we were; most lay down and waited, suffering as they did so, for the hostile bullets, always fired high, as was the invariable Turkish custom, spared the advancing Russians, but dropped fast among the prostrate men further back. But the hesitation did not last long. The foremost volunteers sprang over the first Turkish trench and drove out the Turks with lusty cheers. Those who showed fight were bayoneted on the spot; it was not a time for taking prisoners. Then the laggards took heart, jumped to their feet, and rushed forward. Skobelev came back among them, stormed at them vehemently for their momentary poltroonery, caught them up with a wave of his sword and swept them on at the double. They followed him through the lodgments, then over the first trench, and mingling them with the men in advance, he hurled the whole body in strenuous and successful attack against the face of the Turkish main work, which was carried and held at least for a time.”§

In accordance with Havelock’s idea, men are classified in the Training Battalion as A (above the average), B (average), and C (below the average). The standardization of a Party on completion of the Drill Course is described in Training Battalion Standing Orders, 3rd Part, para. 30, the following being an actual example taken from Training Battalion Routine Orders, Part I., dated 29th November, 1910.

§ *Czar and Sultan*, by Archibald Forbes, page 253.

DRILL DISMISSAL.

No. 151 Party, C Company, is dismissed drill, granted the 7th rate of Engineer Pay from 29-11-10, and classified as follows :—

No. 1 SECTION.—Section Commander, Lance-Corpl. H.

Regtl. No.	Rank.	Name.	Trade.	Trade Qualification.	Drill Classification.	Remarks.
17236	Sappers.	*A. F. ...	Telegraphist (Office).	Fair.	A	Sectional Figure of merit in Educational Qualifications, 42'9. Sectional Figure of Merit in Semaphore Signalling, 97'2.
20386		*T. R. U.	Joiner.	Skilled.	::	
20377		F. C. ...	Plumber.	Fair.	::	
20370		A. E. R.	Fitter.	Skilled.	::	
20380		A. C. ...	Motor Fitter.	Labourer.	B	
20459		S. F. ...	Painter.	Fair.	::	
20369		N. T. G.	Hammerman.	Labourer.	::	
20375		A. G. H.	Painter.	Fair.	::	
20697		W. H.	Gas Fitter.	Fair.	::	
20384		J. L. ...	Bricklayer.	Skilled.	::	
20381		M. G. M.	Cabinet Maker.	Fair.	::	
20373		W. R. ...	Wheelwright.	Skilled.	::	
20382		†J. W. S.	Fitter.	Fair.	::	
20374		W. S. S.	Hammerman.	Labourer.	::	
20375		W. R. S.	Engine Fitter.	Fair.	::	
20385		F. E. W.	Bricklayer.	Skilled.	C::	
20321		S. W. ...	Painter.	Skilled.	C	

* Selected for training as Scouts.

† Best man of Section at Bayonet Fighting.

No. 2 SECTION.—Section Commander, Serjt. H.

Regtl. No.	Rank.	Name.	Trade.	Trade Qualification.	Drill Classification.	Remarks.
16925	Sappers.	*R. McI. ...	Telegraphist (Office).	Skilled.	A	Sectional Figure of Merit in Educational Qualification, 44'3. Sectional Figure of Merit in Semaphore Signalling, 97'08.
20391		*E. W. O.	Electrician.	Skilled.	::	
20402		E. L. B.	Bricklayer	Skilled.	::	
20395		J. W. H.	Moulder.	Fair.	::	
20468		W. B.	Plumber's Mate.	Labourer.	B	
20398		O. J. ...	Painter.	Skilled.	::	
20400		L. F. K.	Plumber.	Fair.	::	
20396		A. K. ...	Joiner.	Fair.	::	
20393		C. K. ...	Plumber.	Fair.	::	
20392		W. McC.	Blacksmith.	Skilled.	::	
20389		A. E. M.	Printer (Compositor).	Fair.	::	
20387		T. P. ...	Fitter.	Skilled.	::	
20401		F. P. ...	Fitter.	Fair.	::	
20403		†J. S. ...	Clerk.	Indifferent.	::	
20330		A. E. T.	Painter.	Skilled.	C::	
20390		C. B. ...	Telephonist.	Indifferent.	C	

* Selected for training as Scouts.

† Best man of Section at Bayonet Fighting.

No. 3 SECTION.—Section Commander, 2nd Corpl. P.

Regtl. No.	Rank.	Name.	Trade.	Trade Qualification.	Drill Classification.	Remarks.
20462	Sappers.	*† G. B. ...	Mason.	Skilled.	A	Sectional Figure of Merit in Educational Qualifications, 38. Sectional Figure of Merit in Semaphore Signalling, 99'21
20463		* W. W. ...	Bricklayer.	Skilled.	"	
20465		G. L. ...	Fitter.	Skilled.	"	
20451		F. McK. ...	Clerk.	Indifferent.	"	
20405		R. E. ...	Plumber's Mate.	Labourer.	B	
20459		J. F. ...	Painter.	Skilled.	"	
20406		G. G. ...	Plumber.	Fair.	"	
20408		J. B. H. ...	Plumber.	Fair.	"	
20460		T. L. ...	Blacksmith.	Skilled.	"	
20466		K. M. ...	Motor Fitter.	Labourer.	"	
20464		R. N. ...	Plumber.	Skilled.	"	
20452		F. N. ...	Electrician.	Indifferent.	"	
20409		H. O. ...	Fitter.	Fair.	"	
20114		G. W. ...	Fitter.	Fair.	"	
20458		J. W. ...	Bricklayer.	Skilled.	C	

* Selected for training as Scouts.

† Best man of Section at Bayonet Fighting.

No. 4 SECTION.—Section Commander, Lance-Corpl. A.

Regtl. No.	Rank.	Name.	Trade.	Trade Qualification.	Drill Classification.	Remarks.
20487	Sappers.	* F. F. ...	Painter.	Skilled.	A	Sectional Figure of Merit in Educational Qualifications, 37'5. Sectional Figure of Merit in Semaphore Signalling, 99'44
20470		* A. M. ...	Machinist.	Labourer.	"	
20467		J. B. ...	Clerk.	Indifferent.	"	
20481		F. E. ...	Carpenter.	Skilled.	"	
20164		F. B. ...	Stonemason.	Skilled.	B	
20469		H. J. ...	Telegraphist (Office).	Fair.	"	
20475		F. M. ...	Electrician.	Indifferent.	"	
20477		† H. Mc L. ...	Telegraphist (P. O).	Indifferent.	"	
20474		F. P. ...	Turner.	Skilled.	"	
20471		C. R. ...	Bricklayer.	Skilled.	"	
20485		H. S. ...	Fitter.	Skilled.	"	
20478		P. C. T. ...	Painter.	Skilled.	"	
20483		W. T. ...	Gas Fitter.	Fair.	"	
20480		W. W. ...	Plumber.	Fair.	"	
20488		A. B. W. ...	Fitter.	Fair.	"	
20476		S. B. ...	Clerk.	Indifferent.	C	

* Selected for training as Scouts.

† Best man of Section and Party at Bayonet Fighting.

The Sectional Figure of Merit in Educational Qualifications is assessed as follows :—

Each man is awarded a figure on the following scale :—

A 1st Class Certificate of Education counts as 100.

A man who has passed in Group 1 of the subjects of the 1st Class Certificate is awarded 90.

A 2nd Class Certificate counts 70.

A 3rd Class Certificate counts 50.

An award of " A " counts 40.

An award of " B " counts 30.

An award of " C " counts 20.

An award of " D " counts 10.

An award of " E " counts 0.

The average figure of the section is then worked out, and is given in the column of Remarks as the Sectional Figure of Merit in Educational Qualifications.

The Sectional Figure of Merit in Semaphore Signalling is arrived at by deducting from 100 the number of errors made by each man in receiving and taking down a test message one hundred letters in length, at a rate of six words a minute.

In the case of No. 151 Party it will be seen that there is very little to choose between the four Sections, either educationally or in Semaphore Signalling.

No. 2 Section (Serjt. H.) comes out best intellectually ; and No. 4 Section (Lance-Corpl. A.) has the best figure of Merit in Semaphore Signalling.

The following from Training Battalion Orders dated 20th March, 1911, is the classification of the same Party on completion of the Recruits' Course.*

CLASSIFICATION OF 151 PARTY, C Co.

Officer Commanding—Capt. K. E. E.

Fieldwork Instructor—Q.M.S. G. N.

On completion of a Recruits' Course of Training at the S.M.E. on 7-3-11, the undernamed sappers are classified as stated against their names :—

* The method of Classification of a Party on completion of the whole course is described in Training Battalion Standing Orders, 3rd Part, paras. 55 and 56.

No. 1 SECTION.

Section Commanders { Drill and Musketry.—Lance-Corpl. H.
 { Fieldworks.—Serjt. H.

Regtl. No.	Rank.	Name.	Individual Classification.					Remarks.
			Drill.	Musketry.	Fieldworks.	General Qualification as Sapper.	School Cert.	
20381	Sappers.	H. M.	B	A	A	Class A.	3	
20380		A. C.	"	B	B		C	
20369		N. G.	"	A	"		3	
20376		A. G. H.	"	B	"	Class B.	C	
20289		D. P.	"	"	"		2	
20373		W. R.	"	C	"		3	
19948		A. S.	"	A	"		3	
20207		M. S.	"	B	"		3	
20330		A. T.	"	"	"		D	
20385		F. W.	"	A	"		3	

COLLECTIVE CLASSIFICATION.—Figures of Merit of Section :—
 School Certificates=42. Conduct Sheets=99·5. Musketry=64·8.
 Fieldworks=81·2. Health=95·5. Best Section Conduct Sheets.

No. 2 SECTION.

Section Commanders { Drill and Musketry.—Serjt. H.
 { Fieldworks.—Serjt. T.

Regtl. No.	Rank.	Name.	Individual Classification.					Remarks.
			Drill.	Musketry.	Fieldworks.	General Qualification as Sapper.	School Cert.	
20402	Sappers.	E. B.	A	B	B	Class B.	3	
20244		J. H.	B	"	"		3	
20152		D. H.	"	"	"		2	
20398		O. J.	"	A	"		C	
20400		L. K.	"	B	"		3	
20396		A. K.	"	A	"		3	
20389		A. M.	"	B	"		2	
20292		W. McC.	"	"	"		D	
20039		J. N.	"	C	"		D	
20401		F. P.	"	B	"		3	
20403		† J. S.	"	"	"		2	
20114		G. W.	"	"	"		3	

† Best man of Section at Bayonet Fighting.

COLLECTIVE CLASSIFICATION.—Figures of Merit of Section :—
 School Certificates=45·9. Conduct Sheets=98·8. Musketry=64·1.
 Fieldworks=82·4. Health=98·3.

No. 3 SECTION.

Section Commanders { Drill and Musketry.—2nd Corpl. P.
Fieldworks.—Corpl. J.

Regtl. No.	Rank.	Name.	Individual Classification.					Remarks.
			Drill.	Musketry.	Fieldworks.	General Qualification as Sapper.	School Cert.	
20697	Sappers.	W. H. ...	B	A	A	Class A.	2	
20451		†H. McK. ...	A	„	„		2	
20462		*†G. B. ...	„	B	B		3	
20164		F. B. ...	B	„	„		3	
20405		R. E. ...	„	A	„	Class B.	B	
20459		J. F. ...	„	B	„		D	
20406		G. G. ...	„	„	„		3	
20179		W. H. ...	„	„	„		3	
20460		F. L. ...	„	A	„		3	
20466		K. M. ...	„	„	„		3	
20464		R. N. ...	„	B	„		C	
20409		H. O. ...	„	„	A		3	
20458		A. W. ...	C	„	B		D	
20463		*W. W. ...	B	A	„		2	

* Selected for training as Scout.

† Best man of Section at Bayonet Fighting.

‡ Haynes Medallist.

COLLECTIVE CLASSIFICATION.—Figures of Merit of Section :—
School Certificates=45. Conduct Sheets=96·2. Musketry=66·4.
Fieldworks=84·1. Health=100. Best Section at Fieldworks and Health.

No. 4 SECTION.

Section Commanders { Drill and Musketry.—Lance-Corpl. A.
Fieldworks.—Serjt. C.

Regtl. No.	Rank.	Name.	Individual Classification.					Remarks.
			Drill.	Musketry.	Fieldworks.	General Qualification as Sapper.	School Cert.	
20467	Sappers.	J. B. ...	A	A	A	Class A.	2	
20476		S. B. ...	C	B	B		2	
20119		F. B. ...	B	A	„	Class B.	3	
20481		T. E. ...	A	„	„		2	
18787		P. F. ...	B	B	„		2	
20457		S. F. ...	„	„	„		3	
20470		*A. M. ...	A	A	„		B	
20474		F. P. ...	B	B	A		2	
20483		W. T. ...	„	„	B		C	

* Selected for training as Scout.

COLLECTIVE CLASSIFICATION.—Figures of Merit of Section :—
School Certificates=55·5 Conduct Sheets=96·6. Musketry=66·5.
Fieldworks=83·2. Health=99·5. Best Section for School Certificates and Musketry.

NOTES.—Figures of merit have been calculated as laid down in Training Battalion Standing Orders, 3rd Part, para. 55 (7). In Fieldworks equal marks have been allotted to Practical Work and Examination. The Practical is calculated from average of Weekly Reports by making $A = 100$, $B = 80$, $C = 60$.

It will be seen that the numbers classified above are considerably fewer in this case than in the case of the Classification on Dismissal from Drill. This arises from the fact that sappers intended for duty with Telegraph Companies and Coast Defence Electric Light Units do a shorter course of Fieldworks than the men destined for service with Field and Fortress Units.

The final Classification or Standardization of the Party therefore contains only the names of sappers who undergo the full course.

The final Classification is the more complete one of the two—containing as it does the Classification in Musketry and in Fieldworks as well as in Drill—and we may therefore confine our attention to it alone. It will be noticed that it consists of an Individual Classification, and a Collective Classification by Sections. It is axiomatic* that any group of men—such as a section—may be considered an expansion of the individuals composing that group.

The sections are on this principle compared with one another as regards average results in school certificates, entries in conduct sheets, musketry scores, knowledge of fieldworks and health.

A considerable part of the credit for such collective superiority is rightly due to the Section Commander, whose name appears at the head of his section.

Each man gets the credit for his own individual classification, and also in a lesser degree for the figure of merit of his section.

The object of the Individual Classification is thus seen to be mainly the praise and encouragement of the individual men; and the object of the Collective Classification is mainly the provision of a stimulus for the Section Commander.

It will be noticed that there are no men in No. 151 Party, C Company, classified as “C” in Fieldworks. This is unusual, and accounted for by is the fact that the Party did an exceptionally good examination in Fieldworks, and was reported on by the Chief Instructor in Fortification as being above the average.

On page 1 it was shown that just before and immediately after enlistment recruits were tested in seven different ways.

These tests—intellectual, moral, æsthetic, emotional, vital, physical, and sexual—include the whole of the various component parts that constitute the make-up of an individual.

* See *The Science of Organization*, by Marshall Bruce-Williams, page 6.

During the six months' course at Chatham, the individual recruit is tested intellectually and æsthetically—or, in other words, practically—and each section is classified morally and vitally, as well as in the other two respects.

The object of these classifications, drawn up during the course, is partly to assist in the elimination of unfit material, and partly to convey praise and encouragement to instructors and recruits.

Thus a recruit, whose general qualification as a sapper is Class A—in order to gain which standard he must have obtained the qualification A at fieldworks, and another A either at drill or musketry—is awarded a certificate to that effect, signed by the Commanding Officer.

This certificate is sent by post to the Commanding Officer of the unit to which the recruit is transferred on completion of his course; and this serves to draw the attention of the former to the fact that the last-joined arrival has done exceptionally well in his recruit's course.

The charts—three in number—accompanying the present pamphlet are not designed for the praise and encouragement of the men, but for the information of the Commanding Officer of the battalion and for the use of the authorities generally.

The decimal system is still followed. Havelock's idea of the division of men into 10 per cent. above the average, 80 per cent. average, and 10 per cent. below the average is retained; but whole Parties are now compared with one another instead of the four Sections within a Party.

The comparison of Parties with one another is effected by recording the values of three representative men in each Party, and not by averaging the values of all the men in the Party. This latter system is made use of in the Collective Sectional Classification described in the last chapter, but in the case of Parties we are dealing with larger numbers, and values of representative men are nearer actual facts than average values.

This comparison of whole Parties with one another enables an opinion to be formed as to the upward or downward tendency of the raw material or of the finished product, measured in terms of the intellect, moral value, practical capacity, and vitality. In other words, the charts enable the Commanding Officer to *measure*, and then to *compare* the material forming the various groups he has to work upon, and lastly to *judge* either of the value of that material, or of the suitability or otherwise of his methods of instruction.

The charts, it will be seen, have been in use for a little over a year. It will hardly therefore be expected that results of much value can have shown themselves as yet.

In one or two cases, however, some variation can be detected.

Intellectually the raw material of a year ago does not vary appreciably from the raw material of to-day. Similarly, their intellectual attainments at the close of the course have remained at practically the same level.

The returns from 158 Party, D Company—received since the Enlistment Chart was completed—show, however, that the man $\frac{1}{10}$ from the bottom has been classified intellectually as E. This is a lower point than has been touched since the records have been kept in chart form.

In Trade Qualifications on enlistment some falling off has begun to show itself.

The man $\frac{1}{10}$ from the top of each Party has always possessed “skilled” qualifications. A difference, however, shows itself when we examine the position of the middle man of each Party, and also the position of the man $\frac{1}{10}$ from the bottom.

Thus in Parties 138 and 139 the middle man of the Party possessed “skilled” qualifications. In no subsequent case has the middle man of the Party been higher than “fair.”

Again Parties 138 to 149 inclusive represent a group in which five times out of twelve the man $\frac{1}{10}$ from the bottom possessed “fair” qualifications.

In no subsequent case has the man $\frac{1}{10}$ from the bottom been higher than “indifferent.”

This would seem to indicate some falling off in the raw material presenting itself for enlistment.

An examination of the charts giving details of Recruit Parties on Dismissal does not in any case indicate a variation as noticeable as has been seen in the Enlistment chart. The “Vital” entry against No. 147 Party at first looks alarming, but as the strength of this Party on Dismissal was only 22, the matter is easily accounted for. The second man from the bottom in the Party must have spent at least 50 days in hospital. The eleventh man of the Party spent no time in hospital at all. Probably the health of the Party was not far below the usual average. The rough rule of 10 per cent. above the average, 80 per cent. average, and 10 per cent. below the average does not work in the case of small numbers. In any group of 100 or even of 50 men the rule would probably hold, but in case of very small numbers it does not give satisfactory results.

The forms on which the results are recorded are prepared by the Knowledge Organization Bureau, Ltd., Charing Cross Chambers, Duke Street, Adelphi, W.C.”

The theory on which the system of records here described is based is fully treated of in *The Science of Organization*, by Marshall Bruce-Williams (Messrs. Chapman & Hall, Ltd.), and in condensed form is described in *The Co-ordination of Knowledge*, sent post free on application to Knowledge Organization Bureau, Ltd.

THE KNOWLEDGE ORGANIZATION BUREAU, LTD.

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H. HALLIDAY SPARLING, Esq.
JAMES GRUN, Esq.

Registered Offices :

2A WESTON STREET, LONDON, W.C.

Secretary :

ION DARBY.

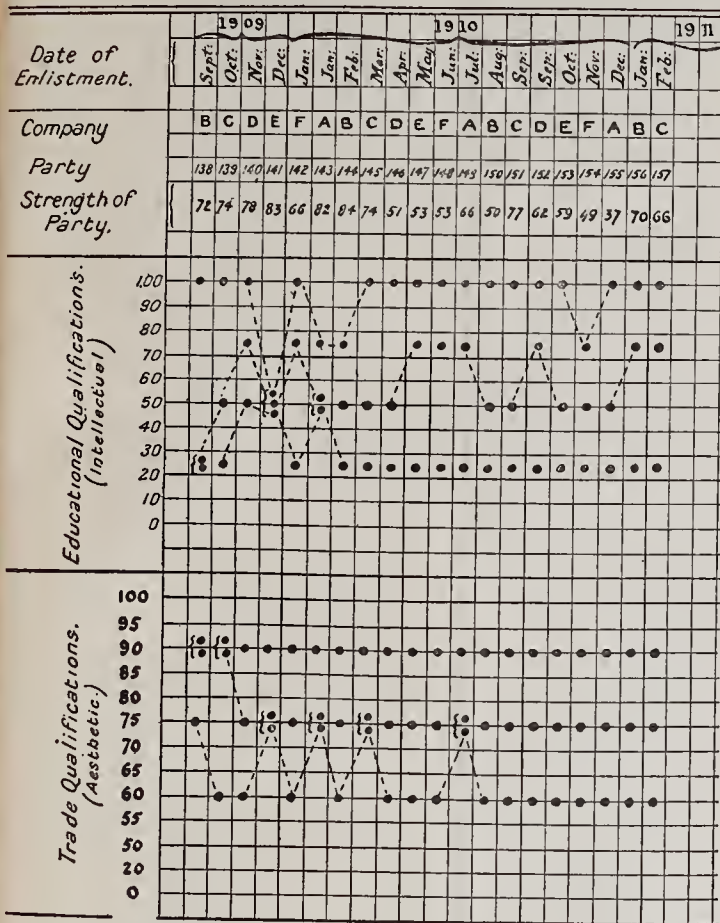
Commercial Offices :

10 & 11 CHARING CROSS CHAMBERS, DUKE STREET,
CHARING CROSS, W.C.,

*to which offices all communications respecting business
should be addressed.*

TRAINING

Chart shewing Figures of Merit of
man & of the man 10 from the bottom,



BATTALION R.E.

the man 10 from the top, of the middle
of Recruit Parties on Enlistment.

Notes

Figures of Merit
have been calculated
as follows:—

Educational Qualifications.

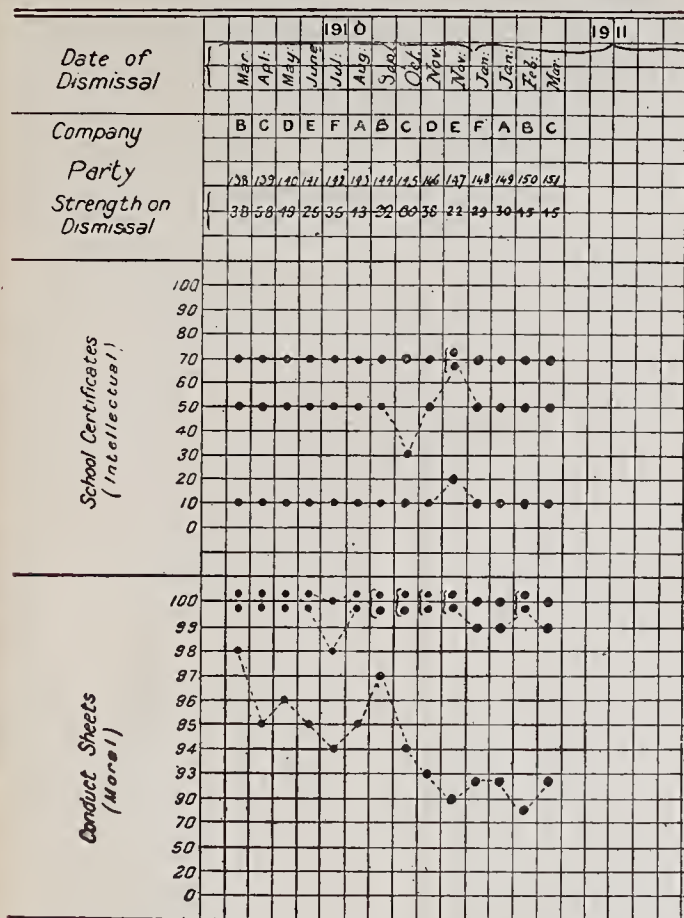
A	=	100
B	=	75
C	=	50
D	=	25
E	=	0

Trade Qualifications.

2 nd rate	"Very superior"	=	100
3 rd "	"Superior"	=	95
4 th "	"Skilled"	=	90
5 th "	"Fair"	=	75
6 th "	"Indifferent"	=	60
7 th "	"& labourers"	=	20

TRAINING

Chart shewing Figures of Merit of
man. & of the man $\frac{1}{10}$ from the bottom.



BATTALION R. E.

the man $\frac{1}{10}$ from the top. of the middle
of Recruit Parties on Dismissal

Notes

Figures of Merit
have been calculated
as follows

School Certificates

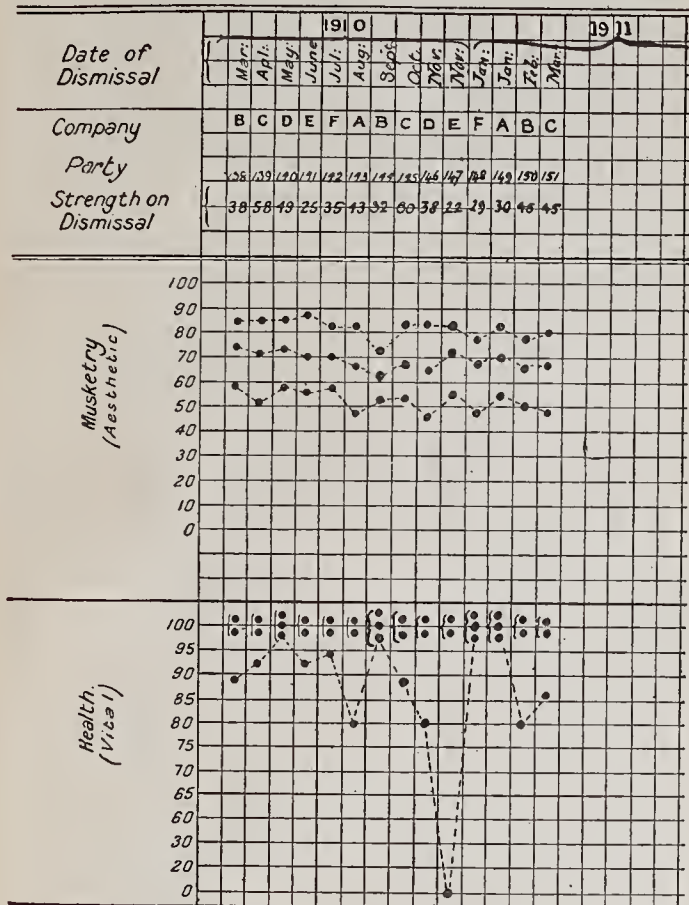
1st Class = 100
Group I = 90
2nd Class = 70
3rd = 50
A = 40
B = 30
C = 20
D = 10
E = 0

Conduct Sheets

1 Mark deducted
for each day of
confinement to
barracks, and 10
marks for each
days Detention

TRAINING

Chart shewing Figures of Merit of
man, & of the man to from the bottom.



BATTALION R. E.

the man to from the top, of the middle
of Recruit Parties on Dismissal

Notes

Figures of Merit
have been calculated
as follows:-

Musketry

Actual score made in
Recruits' Classification
Practice (Possible 105)

Health

2 marks deducted
for each day spent
in hospital

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